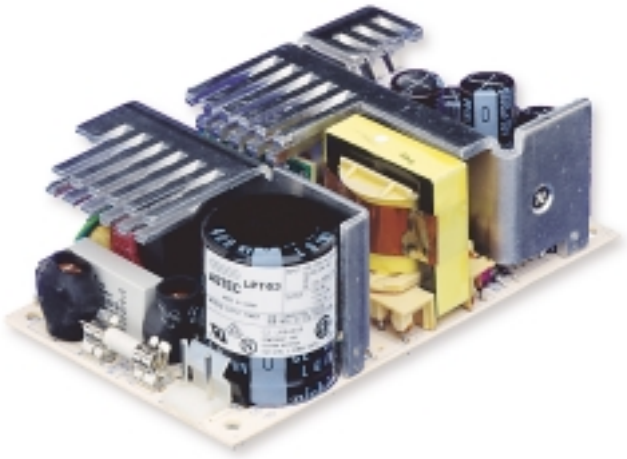
LPS 60

60 Watts

LPS 60 Series

Total Power	***60 - 80 Watts***
Input Voltages	***85 - 264 VAC 120 - 370 VDC***
# of Outputs	***Single***



SPECIAL FEATURES

- Universal input
- High efficiency
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Overvoltage protection
- Overload protection
- Enclosure kit available (see page 62 or PowerFAX Doc. no 1025)

ENVIRONMENTAL

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

MTBF demonstrated: >550,000 hours at full load and 25°C ambient conditions

ELECTRICAL SPECIFICATIONS

Input

Input range	85-264 VAC 120-370 VDC
Frequency	47-440 Hz
Inrush current	<18 A peak @ 115 VAC; <36 A peak @ 230 VAC, cold start @ 25°C
Input current	1.5 A max. (RMS) @ 115 VAC
Efficiency	70% typical at full load
EMI filter	FCC Class B conducted CISPR 22 Class B conducted EN55022 class B conducted VDE 0878 PT3 class B conducted
Safety ground leakage current	<0.5 mA @ 50/60 Hz, 264 VAC input

Output

Maximum power	60 W for convection; 80 W with 30 CFM forced air
Adjustment range	-5, +10% minimum
Hold-up time	20 ms @ 60 W load, 115 VAC nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5 V output: 5.7-6.7 VDC. Other outputs 10% to 25% above nominal output
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

SAFETY

VDE	0805/EN60950 (IEC950)	11774-3336-1255 (LC #86665)
UL	UL1950	E132002
CSA	CSA 22.2-234 Level 3	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P95100123
BABT	EN60950/BS7002	PS / 605272
CB	Certificate and report	1521, 1522, 1523, 1524
CE	Mark (LVD)	

ASIA
6F., CDW Building
382-392 Castle Peak Road
Tsuen Wan, N.T., Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426

EUROPE
Astec House, Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX, UK
Telephone: 01384-842211
Facsimile: 01384-843355

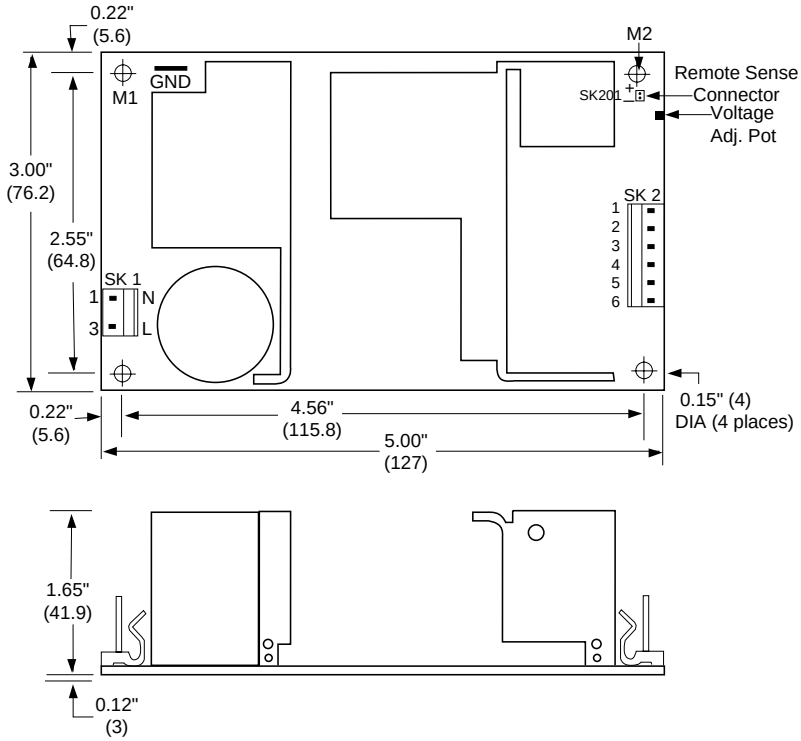
AMERICAS
5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
LPS61	3.3 V	2 A	12 A	16 A	18 A	±2%	33 mV
LPS62	5 V	0 A	12 A	16 A	18 A	±2%	50 mV
LPS63	12 V	0 A	5 A	6.7 A	7.5 A	±2%	120 mV
LPS64	15 V	0 A	4 A	5.3 A	6 A	±2%	150 mV
LPS65	24 V	0 A	2.5 A	3.3 A	3.8 A	±2%	240 mV
LPS68	48 V	0 A	1.3 A	1.7 A	1.9 A	±2%	480 mV

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line votlage and load ranges.

DRAWINGS



MATING CONNECTORS

AC Input: Molex 09-50-8031 (USA)
09-91-0300 (UK)
PINS: 08-58-0111

DC Outputs: Molex 09-50-8061 (USA)
09-91-0600 (UK)
PINS: 08-58-0111

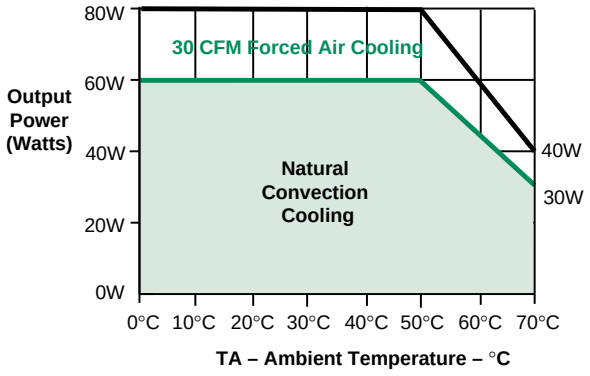
Remote Sense: Molex 22-01-2025
PINS: 08-50-0114

Astec Connector Kit #70-841-006

NOTES

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. Mounting holes M1 and M2 should be grounded for EMI purposes.
4. Mounting hole M1 is safety ground connection.
5. Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
6. Warranty: 1 year
7. Weight: 0.75 lb. / 0.34 kg

Power Derating Curve



PIN ASSIGNMENTS

Connector	LPS61	LPS62	LPS63	LPS64	LPS65	LPS68
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
SK1-3	Line	Line	Line	Line	Line	Line
SK2-1	3.3 V	+5 V	+12 V	+15 V	+24 V	48 V
SK2-2	3.3 V	+5 V	+12 V	+15 V	+24 V	48 V
SK2-3	3.3 V	+5 V	+12 V	+15 V	+24 V	48 V
SK2-4	Common	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common	Common	Common
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense